

Claims 1-10 (Canceled)

(a) first means for detecting at least solid object information ahead of an own

vehicle;

vehicle based on the solid object information;

(d) fourth means for judging whether the preceding vehicle will deviate from a state

of being in a preceding position relative to the own vehicle based on the position of the preceding vehicle relative to the own vehicle and based on coordinates of the travel path for the own vehicle, as well as based on information of a solid object other than the preceding vehicle itself and which is in vicinity of the preceding vehicle, wherein if the fourth means determines that there is a possibility that the preceding vehicle will deviate from the state of being in the preceding position relative to the own vehicle, a signal is generated.

according to claim 11, wherein the first means detects road information ahead of the own vehicle in addition to the detected solid object information and detects a traveling condition of the own vehicle, and the third means estimates a new travel path of the own vehicle based on a first travel path of the own vehicle which is

estimated based on the road information and based on a second travel path that is estimated based on the traveling condition of the own vehicle.

13. (New) The vehicle surroundings monitoring apparatus according to claim 12, wherein the first travel path is obtained based on lane markers and side walls and the second travel path is obtained based on yaw rates of the own vehicle.

14. (New) The vehicle surroundings monitoring apparatus according to claim 11, wherein the fourth means judges the deviation possibility according to a frontal distance of the preceding vehicle from the own vehicle and a separation of the preceding vehicle from the travel path of the own vehicle.

15. (New) The vehicle surroundings monitoring apparatus according to claim 11, wherein the fourth means judges the deviation possibility by judging that when the preceding vehicle is farther than a preestablished distance, there is no possibility of deviation of the preceding vehicle from the travel path of the own vehicle.

16. (New) The vehicle surroundings monitoring apparatus according to claim 11, wherein the fourth means judges the deviation possibility by providing a plurality of distance divisions ahead of the own vehicle, establishing vehicle deviation regions in predetermined left and right areas around the travel path of the own vehicle at the respective distance divisions, wherein the fourth means judges that the possibility of deviation of the preceding vehicle is greater when the preceding vehicle is in the vehicle deviation regions and expresses the deviation possibility as a specified numerical value, and

the fourth means sums the numerical values and when the sum exceeds a predetermined threshold value, then the fourth means judges that there is a possibility of deviation of the preceding vehicle.

17. (New) The vehicle surroundings monitoring apparatus according to claim 16, wherein the distance divisions comprise a first division near the own vehicle, a second division in front of the first division and a third division in front of the second division.

18. (New) The vehicle surroundings monitoring apparatus according to claim 16, wherein when the preceding vehicle is in a preestablished region in the vicinity of the travel path of the own vehicle, the fourth means clears

19. (New) The vehicle surroundings monitoring apparatus
claim 16, wherein when a solid object, moving forward substantially in
the same direction as the own vehicle and in a direction different from the preceding
vehicle, is detected in the travel path of the own vehicle in the vicinity of the preceding
vehicle, the monitoring means judges an increased possibility of deviation of the
solid object and expresses the deviation possibility as a specified numerical
value, and adds the numerical value to the sum of the numerical values.

wherein the system is configured to operate in a constant speed control mode where the own vehicle travels at a speed inputted by a driver and a follow-up control mode where the own

vehicle travels at a speed targeted to a speed of the preceding vehicle with a constant intervehicle distance to the preceding vehicle being maintained.

21. (New) A vehicle surroundings monitoring apparatus comprising:

(a) first means for detecting at least solid object information ahead of an own vehicle, wherein the solid objects are classified as being one of a still object, a forward moving object and a backward moving object;

(b) second means for recognizing a preceding vehicle traveling in front of the own vehicle based on the solid object information;

(c) third means for estimating a final travel path for the own vehicle on a road ahead, wherein the third means estimates the final travel path based on a first travel path that is calculated based on solid objects that define the road ahead and a second travel path that is based on yaw rates of the own vehicle; and

(d) fourth means for judging a possibility that the preceding vehicle will deviate from a state of being in a preceding position relative to the own vehicle based on relative position of the preceding vehicle and coordinates of the final travel path of the own vehicle and if the fourth means calculates that the respective coordinates of the preceding vehicle and the travel path of the own vehicle is less than a predetermined value, then a judgment counter TIME is initialized according to a position of the preceding vehicle, as well as a position of any detected solid objects other than the preceding vehicle, the fourth means comparing the judgment counter TIME with a threshold value and if the judgment counter TIME is greater than the threshold value, then the fourth means

generates a signal to indicate that there is a possibility that the preceding vehicle will deviate from its position as being in the preceding vehicle state.

22. (New) The vehicle surroundings monitoring apparatus according to claim 11, wherein if the fourth means judges that there is no possibility of deviation of the preceding vehicle, then the fourth means judges whether a turn signal switch is on and in the case where it is judges that the turn signal switch is not on, the fourth means then compares whether a steering wheel angle is greater than a threshold value and if not, the fourth means calculates a present travel path of the own vehicle based on the final travel path and a previous final travel path calculated prior to calculating the current final travel path.

23. (New) A vehicle surroundings monitoring apparatus comprising:

- frontal information detecting means for detecting at least solid object information ahead of an own vehicle;
- traveling path estimating means for estimating a traveling path of the own vehicle;
- preceding vehicle recognizing means for recognizing a preceding vehicle traveling in front of the own vehicle based on the solid object information;
- forward-traveling object judging means for judging whether there is any forward-traveling object, which travels in the same direction as the own vehicle, other than the preceding vehicle based on the solid object information;
- first judgment counter setting means for setting a judgment counter in response to a distance in the traveling direction between the preceding vehicle and the own vehicle and a state of

deviation of the preceding vehicle from the traveling path of the own vehicle, in a case where the preceding vehicle has been recognized, in order to judge the evacuation of the preceding vehicle;

judgment counter correcting means for correcting the judgment counter towards an evacuation side as the preceding vehicle in a case where any forward-traveling object other than the preceding vehicle has been judged; and

preceding vehicle evacuation judging means for comparing the corrected judgment counter value and a preset value to judge the evacuation of the preceding vehicle.

24. (New) The vehicle surroundings monitoring apparatus according to claim 23, wherein the frontal information detecting means detects road information ahead of the own vehicle in addition to the solid object information, and the traveling path estimating means estimates the traveling path of the own vehicle based on the road information as a first traveling path of the own vehicle, estimates the traveling path of the own vehicle based on a yaw rate of the own vehicle as a second traveling path of the own vehicle, and estimates a third traveling path of the own vehicle by synthesizing the first traveling path of the own vehicle and the second traveling path of the own vehicle.

25. (New) The vehicle surroundings monitoring apparatus according to claim 23, wherein the preceding vehicle judging means judges the evacuation by judging that when the preceding vehicle is farther than a preestablished distance, the preceding vehicle will not evacuate from the travel path of the own vehicle.

26. (New) The vehicle surroundings monitoring apparatus according to claim 23, wherein the preceding vehicle judging means judges the evacuation by providing a plurality of distance divisions ahead of the own vehicle, establishing vehicle evacuation regions in predetermined left and right areas around the travel path of the own vehicle at the respective distance divisions, wherein the fourth means judges the evacuation of the preceding vehicle is greater when the preceding vehicle is in the vehicle evacuation regions and expresses the evacuation as a specified numerical value, and

the preceding vehicle judging means sums the numerical values and when the sum exceeds a predetermined threshold value, then the preceding vehicle judging means judges the evacuation of the preceding vehicle.

27. (New) The vehicle surroundings monitoring apparatus according to claim 26, wherein the distance divisions comprise a first division near the own vehicle, a second division in front of the first division and a third division in front of the second division.

28. (New) The vehicle surroundings monitoring apparatus according to claim 26, wherein when a solid object, moving forward substantially in the same direction as the own vehicle and in a direction different from the preceding vehicle, exists in the travel path of the own vehicle in the vicinity of the preceding vehicle, the preceding vehicle judging means judges the evacuation of the preceding vehicle and expresses the evacuation as a specified numerical value, and adds the numerical value to the sum of the numerical values.